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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/642,108	08/21/2000	Alan B. Caldwell	9-13528-110US KD:kp	8670
20988	7590	05/31/2005	EXAMINER	
OGILVY RENAULT LLP 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA			VANDERPUYE, KENNETH N	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/642,108

Applicant(s)

CALDWELL ET AL.

Examiner

Kenneth N. Vanderpuye

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-41,45-82 and 85-121 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,8-10,24-26,41,45,46,49-51,65-67,82,85-87,90-92,106 and 107 is/are rejected.
- 7) ☒ Claim(s) 6,7,11-23,27-40,47,48,52-64,68-81,88,89,93-105 and 108-121 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 67, 82 are rejected under 35 U.S.C. 102(b) as being anticipated by Kudo(5,802,068)

Claim 67, 82 is rejected because Kudo teaches a system comprising (a) an ingress gateway(Fig. 1): (i) means for accumulating a predetermined number of successive bytes of a data stream respecting the data service, independently of communications protocol of the datastream; (Fig. 1 accumulate video data or audio data in a buffer) , ii) means for encapsulating the accumulated bytes as a payload packet within a container;(see rejection of this limitation in claim 1) and iii) means for encapsulating the container within a protocol data unit of a broadband packet network.(see rejection of this limitation in claim 1), (b) means for conveying the PDU through

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the broadband packet network to an egress gateway(inherently taught because the multiplexed data must be demultiplexed);  
(c) the egress gateway comprising: (i) means for extracting a respective container from each received PDU;(inherently taught because the reverse of encapsulation must be performed) and (ii) means for reconstructing the data stream from using the respective containers.(inherently taught because the reconstruction is part of reverse encapsulation).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-5, 8-10, 24-26, 41, 45-46, 49-51, 65-66, 85-87, 90-92, 106-107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kudo(5,802,068)

With regards to claims 1, 41 Kudo teaches a method of extending a data service through a broadband network, the method comprising steps of: accumulating a predetermined number of

successive bytes of a data stream respecting the data service at an ingress gateway independently of a communication protocol of the data stream(Fig. 1, accumulate video data or audio data in a buffer), encapsulating the accumulated bytes as a payload packet within a container(Fig. 1@6, 7, packet selecting and packet forming unit); encapsulating the container within a PDU of the broadband packet network (Fig. 1@8, pack forming unit) and forwarding the PDU through the broadband network to an egress gateway (Fig. 1, transmit multiplexed). The broadband protocol used in Kudo is the MPEG standard. However it is stated in col. 6 lines 60-67, that this technique is not limited to MPEG alone. ATM and UDP/IP, TCP/IP, IP/MPLS are well known broadband protocols. It would have been obvious to one of ordinary skill in the art that other broadband protocol standards can be used to practice the invention in Kudo.

Claims 4, 45, 86 are rejected because the knowledge of the communication protocol of the data stream is not a factor forming the packet. It is the format that is important.

Claims 5, 46, 87 are rejected because the payload packet is formed based on the data format i.e. audio or video.

Claims 8, 49, 90 are rejected because the data stream comprises sequential PDUs of the MPEG packets.

Claims 9, 50, 91 are rejected as being inherently taught because if the number of bytes forming the payload packet were not an integer multiple of the bytes forming the PDU, the container would have to be broken down in order to fit into the PDU. In Kudo, the payload is padded smaller than the PDU.

Claims 10, 51, 92 are rejected because the protocol of data stream is not relevant, it is the protocol of the broadband network that is relevant.

Claims 24, 65, 106 are rejected because it is well known in the art that if the communications protocol TCP, sequence numbers must be used in order to implement some form of error control. It would have been obvious to one of ordinary skill in the art to combine this well known art with Kudo for the purpose of adding sequence numbers if the communications protocol is TCP. The motivation being error control.

Claims 25, 66, 107 are rejected because the use of a sequence number as a start delimiter is obvious as a matter of design choice.

Claim 26 is rejected for the same reasons as claim 67.

Claim 85 is rejected because although not explicitly taught the broadband protocol used in Kudo is the MPEG standard. However it is stated in col. 6 lines 60-67, that this technique is not limited to MPEG alone. ATM and UDP/IP, TCP/IP, IP/MPLS are well known broadband protocols. It would have been obvious to one of ordinary skill in the art that other broadband protocol standards can be used to practice the invention in Kudo.

***Allowable Subject Matter***

Claims 6-7, 11-23, 27-40, 47-48, 52-<sup>64</sup>~~66~~, 68-81, 88-89, 93-105, 108-121 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth N Vanderpuye whose telephone number is 703-308-7828. The examiner can normally be reached on M-F(7:30-5:00) Second Friday Off.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



KENNETH VANDERPUYE  
PRIMARY EXAMINER

KNV  
5/14/05